

## INSTRUCT-O-GRAM

# THE HANDS-ON TRAINING GUIDE FOR THE FIRE INSTRUCTOR

**VOLUME XXII · ISSUE 10** 

**NOVEMBER 2001** 

# **Emergency Response to Terrorism**Weapons of Mass Destruction (WMD)

#### Task

The threat of terrorism affects all communities both on the national level and internationally. History has shown that there is no community immune from terrorist acts. Terrorism has been with humanity since societies have had interactions resulting in arguments and disagreements in philosophies. The purpose of this Instruct-O-Gram is to circulate information that may be vital to the emergency responder. The response to Weapons of Mass Destruction incidents is complex in nature and will require responders to utilize their expertise in all areas of emergency services. It is important that emergency response personnel recognize the potential of a terrorist attack at any incident.

#### **Objectives**

- 1. Define *domestic terrorism* per the U.S. Department of Justice.
- 2. Define *international terrorism* per the U.S. Department of Justice.
- 3. Define *terrorism* per the U.S. Department of State.

- 4. Define the differences and similarities between responding to terrorist and non-terrorist incidents.
- 5. Recognize situations and circumstances that may indicate possible terrorism.

#### **Instructional Aids**

WMD Special Hazards Emergency Response Guidebook

Emergency Response to Terrorism Materials (National Fire Academy)

2000 Emergency Response Guide

Information on recent terrorism events

Response preplans to district and mutual aid target hazards

Information on upcoming local events, which could be potential targets for terrorism

#### **Estimated Teaching Time**

The teaching of terrorism and WMD is one on which a timeline should not be placed. The amount of time to cover the potential risks in each community will

Copyright © 2001 International Society of Fire Service Instructors

All rights reserved. No part of this document may be reproduced, in any form or by any means, without permission in writing from the publisher.

vary immensely. This Instruct-O-Gram is designed to allow you to expand upon the areas in as much detail as required. Remember that the safety of responders must always be paramount.

#### **Presentation**

#### I. Defining Terrorism

A violent act or an act dangerous to human life, in violation of the criminal laws of the United States or any segment to intimidate or coerce a government, the civilian population or any segment thereof, in furtherance of political or social objectives (U.S. Department of Justice)

- A. Domestic Terrorism Involves groups or individuals whose terrorist activities are directed at elements of our government or population without foreign direction.
   (Federal Bureau of Investigation)
- B. International Terrorism Involves groups or individuals whose terrorist activities are foreign-based and/or directed by countries or groups outside the United States or whose activities transcend national boundaries. (Federal Bureau of Investigation)
- C. Weapons of Mass Destruction Any destructive device, defined as an explosive device, incendiary, poison gas, bomb, grenade or rocket, having a propellant charge of more than four ounces. Poison gas or any weapon involving a disease organism, or designed to release radiation at a level to be dangerous to human life. (U.S. Federal Law)

### II. Types of Terrorism, Bombings and Weapons of Mass Destruction (B-NICE)

A. Biological – Can be disease-causing organisms (bacteria, rickettsia or viruses) or toxins produced by living organisms. Most often method for disseminating these

biological agents is through the use aerosol dispersion. This creates an airborne hazard. These may go undetected for a long period of time, unless a terrorist groups claims responsibility for the release.

- 1. Bacteria and Rickettsia Single celled organisms which have been known to cause a variety of diseases in plants, animals or extremely potent toxins in humans. (National Fire Academy)

  Types: Anthrax, Plague
- Viruses Require the use of a host cell and are much smaller than bacteria.
   Viruses utilize the host cells' reproductive mechanism to produce additional viruses. (National Fire Academy)
   Types: Smallpox, Venezuelan Equine Encephalitis (VEE)
- 3. Toxins Potential poisons produced by a variety of living organisms including bacterial, plants and animals. (National Fire Academy) Types: Botulinum toxins, Staphylococcal Enterotoxins, Ricin
- B. Nuclear The use of nuclear/radioactive material
  - 1. Fission Device Atomic bomb
  - Release or Dispersal Accomplished by packing nuclear materials around a conventional explosive device
  - 3. Target Hazard Large-scale conventional explosive device detonated in close proximity to a target that contains large quantities of nuclear materials. (i.e. nuclear power plant)
- *C. Incendiary* The use of fire. This method has been utilized for years due to fire's

- capability to have destructive effects, loss of life and the pandemonium concept on the population.
- D. Chemical Substances that are capable of killing or injuring through a variety of means.
  - 1. Nerve Agents Some of the most toxic known chemicals. They possess hazards in both the liquid or gaseous states. Acetylcholine- chemical that is naturally occurring in the body that allows neurological impulses to be carried from one neuron (nerve cell) to another. Acetylcholinesterase is the enzyme that removes the Acetylcholine after the impulse has been transmitted to prepare the junction (synapse) to transmit another impulse. Inhibiting Acetylcholinesterase will prevent the synapse from being cleaned. If the synapse is not cleaned, continual nerve impulses resulting in convulsions and other uncontrolled muscle reactions will occur.
  - 2. Blistering Agents Their effect on exposed tissue is somewhat similar to that of a corrosive chemical like lye or strong acid.
  - 3. Blood Agents Commonly known as cyanides. These agents can cause rapid respiratory arrest and death.
  - 4. Choking Agents Known to cause eye and airway irritation, dyspnea, chest tightness, and delayed pulmonary edema.
  - 5. *Irritants* More commonly known as riot control chemicals. Usually cause burning or pain on exposed mucous membranes and skin.

E. Explosive – Any device that is primarily targeted at the destruction of objects rather than individuals. The life destruction is an additional benefit factor to terrorists.

#### III. The Emergency Response Challenge

The response to any incident takes full focus by each of the emergency response personnel. Incidents today are much more complex due to the nature of building materials, furnishings, and the types of businesses and their work in progress. In other words, we have to be on our toes. In addition to these problems our responses are escalating to new heights with the past and recent events that have involved terrorism. It is imperative that the Incident Command System (ICS) be utilized to its fullest potential. Accountability of emergency response personnel is crucial. This will allow for quickened identification and treatment of personnel if they are exposed to terrorism agents. It is important to also remember that terrorists have utilized secondary devices. These devices are targeted towards the emergency response personnel.

#### IV. The three priorities for response activities

- A. Life safety
- B. Prevent damage to the environment
- C. Prevent damage to real property

The acronym DECIDE has been used to aid in the response to terrorism activities

- **D** Detect the presence of a terroristic event
- E Estimate likely harm without intervention
- C Choose the response
- I Identify the action options (base this on training and equipment)
- **D** Do the best option
- E Evaluate your progress

#### **Summary**

It is apparent that technology has changed over the years. The sophistication of incidents has been effected by this change and responses must meet these changes as well. Regardless of the mechanism or motive behind the incident, it is important for responders to stay focused. Training is the key to a safe and efficient operation. The events of September 11, 2001 will forever be remembered by the world as a day that went down in infamy. The loss of emergency response personnel was the worst recorded in history. As events continue to unfold around the World, emergency response personnel have become the first line of defense in the response to terrorism. Training is the key to handling these responses.

#### References

Emergency Response to Incidents Involving Chemical & Biological Warfare Agents

John Medici and Steve Patrick

Virginia Department of Emergency Services

Emergency Response to Terrorism: Basic Concepts

U.S. Department of Justice – Federal Emergency Management Agency

#### Hazardous Materials for EMS

Phil Currance and Alvin C. Bronstein

Mosby Publishing

<u>Preparing for Terrorism – An Emergency Service</u> Guide

George Buck

Delmar Publishers

WMD Special Hazards Emergency Response Reference and Guide

H. K. Carr

H. K. Carr and Associates

#### **Acknowledgements**

The materials in this Instruct-O-Gram were prepared by:

Douglas K. Cline, Captain, Chapel Hill (NC) Fire
Department and H. K. (Skip) Carr, President, H.
K. Carr and Associates

This Instruct-O-Gram is dedicated to those brave heroic individuals who have died in the line of duty.

The Instruct-O-Gram is the monthly training outline of the International Society of Fire Service Instructors (ISFSI). The monthly Instruct-O-Gram is provided as one of the benefits of membership in ISFSI.

Call 1-800-435-0005 for information on other benefits of membership.